Amendments to the Specification:

In the English translation of the amended sheets, please delete the term --Description-- at page 1 line 1 before the title.

In the English translation of the amended sheets, please add the section heading and paragraph at page 1 line 6, after the title, as follows:

--CROSS REFERENCE TO RELATED APPLICATIONS

This application is the US National Stage of International Application No. PCT/EP2004/008292, filed July 23, 2004 and claims the benefit thereof. The International Application claims the benefits of German application No. 102004009138.2 DE filed February 25, 2004, both of the applications are incorporated by reference herein in their entirety.--

In the English translation of the amended sheets, please add the section heading at page 1 line 6, after the newly added CROSS REFERENCE TO RELATED APPLICATIONS section, as follows:

--FIELD OF INVENTION--

In the English translation of the amended sheets, please amend the paragraph at page 1 lines 6-8, as follows:

The invention relates to a method and arrangement for combining time-division multiplex signals ~~according to the generic portions of claims 1 and 16~~.

In the English translation of the amended sheets, please add the section heading at page 1 line 10, as follows:

--BACKGROUND OF THE INVENTION--

In the English translation of the amended sheets, please add the section heading at page 1 line 24, as follows:

--SUMMARY OF INVENTION--

In the English translation of the amended sheets, please amend the paragraph at page 1 lines 24-29, as follows:

~~The~~ An object of the invention is to specify a method and arrangement, which allow the combination of time-division multiplex signals with optimized occupancy, in so far as some occupied and unoccupied channels with common time correspondence are contained in the time-division multiplex to be combined.

In the English translation of the amended sheets, please delete the paragraph at page 1 lines 31-33.

In the English translation of the amended sheets, please amend the paragraph at page 5 lines 27-28, as follows:

Advantageous developments of the invention are specified in the ~~subclaims~~dependent claims.

In the English translation of the amended sheets, please add the section heading at page 5 line 30, as follows:

--BRIEF DESCRIPTION OF THE DRAWINGS--

In the English translation of the amended sheets, please add the section heading at page 6 line 19, as follows:

--DETAILED DESCRIPTION OF INVENTION--

In the English translation of the amended sheets, please amend the paragraph at page 6 line 19 – page 7 line 12, as follows:

Fig. 1 shows a schematic diagram of a required reassignment of the content X, Y of the channels for the inventive combining of two time-division multiplex signals S1, S2 to form a resulting time-division multiplex signal S3 with periodically N=8 channels. The first and second time-division multiplex signals S1, S2 have the following sequence "XOXXOOXX" or "OOOYYOYO" within N=8 channels for occupied channels with content X, Y and for unoccupied channels with content O. The immediate combining of both time-division multiplex signals S1, S2 would cause a collision for commonly occupied channels with time

correspondence GBK at the fourth and seventh positions (see above in bold) of both sequences. Channel-related combining can take place in a collision-free manner at other positions in the sequence. Both sequences now also have commonly unoccupied channels with time correspondence NGBK at the second and sixth positions (see above underlined) of both sequences, which are identified according to the method and then ~~[lacuna]~~ as free time slots or channels for the reassignment of the commonly occupied channels with time correspondence GBK still with collision potential. A possible solution to the reassignment in Figure 1 is shown by means of two reciprocal time displacements of the content Y from the fourth and seventh time slots to the second or sixth time slot of the second time-division multiplex signal S2. There are then no more commonly occupied channels with time correspondence GBK and further channel combining can take place in a collision-free manner by simple addition.

In the English translation of the amended sheets, please amend the paragraphs at page 8 line 24 – page 10 line 3, as follows:

A further identical device chain, as described above for branching, time displacement and reinsertion, with a second drop module OADM2, a second delay element T2 and a second insertion facility EK2 is connected downstream from the insertion facility EK1. The same also applies to the second time-division multiplex signal S2, which is divided as for the first time-division multiplex signal S1 into two such device chains for branching, time displacement and reinsertion with further third and fourth drop modules OADM3, OADM4, delay elements T3, T4 and insertion facilities

~~page 8 ends~~

~~[lacuna]~~

~~page 9 starts~~

times the basic bit rate of 10 GBit/s of a channel. In this instance the total number Nges of channels is a multiple of 4. To realize an appropriate arrangement for this purpose according to the model in Figure 2 but for N time-division multiplexed channels, at least Nges/4 branches or reinsertions and 1+Nges/4 time displacements are required for contents X, Y of the channels of

both time-division multiplex signals S1, S2. In other words, Nges/4 drop modules, Nges/4 insertion facilities and 1+Nges/4 time delay elements are required. According to the example in Figure 2 two drop modules, two insertion facilities and two (three with T1) time delay elements were arranged in series for the first time-division multiplex signal S1 and a further two drop modules, two insertion facilities and two time delay elements for the second time-division multiplex signal S2. This symmetrical arrangement for both time-division multiplex signals S1, S2 is advantageous compared with an asymmetrical arrangement such as three serial "drop modules, insertion devices and time delay elements" chains for the first time-division multiplex signal S1 and one serial "drop modules, insertion devices and time delay elements" chain for the second time-division multiplex signal S2, as in an asymmetrical arrangement the characteristics of the asymmetrically transmitted signals are influenced differently. In other words different amplification means for example have to be adjusted in each serial chain. Efforts are therefore made to ensure that the most identical number possible of channel-related branches, time displacements and reinsertions are used for each time-division multiplex signal S1, S2 to be combined.

In the English translation of the amended sheets, please amend the paragraph at page 14 line 11 – page 15 line 3, as follows:

An arrangement ZKE1, ZKE2, OADM1, OADM2, OADM3, OADM4, OADM5, T0, T1, T2, T3, T4, KO, CTRL, λ-KONV according to Figure 4 is now connected downstream at the switching output of the respective drop device OADM61, ..., OADM6i, ..., OADM6m with a first time-division multiplex signal S11, ..., S1i, ..., S1m with N1, ..., Ni, ..., Nm undropped data channels respectively, where Ni=Mi-Ki. A second time-division multiplex signal S21, ..., S2i, ..., S2m with N21, ..., N2i, ..., N2m (time-division multiplexed) data channels is combined with the first time-division multiplex signals S11, ..., S1i, ..., S1m via a time slot controller ZKE2 and an add-drop module OADM5 of each arrangement according to Figure 4. If there is a collision risk between data channels of the first and second time-division multiplex signals S1i, S2i (i=1, ..., m), the add-drop module OADM5 has ~~[lacuna]~~ from a drop signal Ski according to Figure 4, to which another wavelength λj, where j≠I, is allocated via the wavelength converter λ-KONV and/or an additional wavelength switch λ-SWITCH. For reasons of clarity, this circuit is only shown for both time-division multiplex signals S11 and S21 according to Figure 4. The

wavelength-converted or switched signal S_{ADD} is also fed, as a second input time-division multiplex signal S2i, to a further arrangement according to Figure 4, whose first time-division multiplex signal S1i to be combined has the same wavelength - $\lambda 1$ in Figure 4.